ELLENE HERA MASHALIDIS

NIH-Cambridge Scholar 2008

Degrees: University of Arizona, B.S., Biochemistry and Molecular Biophysics, 2008

Research Interests: Rational Drug Design for Tuberculosis

Ellene Hera Mashalidis graduated *summa cum laude* with honors in Biochemistry and Molecular Biophysics from the University of Arizona. Ellene has a deep interest in multidisciplinary and translational research. Her research endeavors integrate information and technologies from diverse scientific fields—chemistry, molecular biology, physics, and computer science—to solve practical problems in clinical medicine. Ellene began her undergraduate career with support from the T.W. Lewis Scholarship, the Joe Martin Foundation Scholarship, and the University of Arizona President's and Provost's Scholarships. She studied the biophysical and physiological properties of adiponectin, a protein secreted from adipose tissue that plays a role in maintaining insulin sensitivity. Under the direction of Dr. Tsu-Shuen Tsao, Ellene probed the mechanisms by which the biophysical state of adiponectin confers information about whole-body metabolism, specifically predisposition to type 2 diabetes mellitus. She received awards and honors for her work including the Barry M. Goldwater Scholarship, the Michael A. Wells Research Fellowship, and the Women in Science and Engineering Grant, and she placed first in the 2006 AAAS-SWARM general poster session. She is a Phi Beta Kappa member, a Pillars of Excellence Scholar, and a recipient of the Outstanding Senior Award from the Department of Biochemistry and Molecular Biophysics. Ellene's current research interests are in the area of rational drug design for tuberculosis (TB). Tuberculosis is the second highest cause of death due to an infectious disease after HIV/AIDS and is the leading cause of death among people infected with HIV. A recent report from the World Health Organization (WHO) revealed that there were 9.2 million new cases of TB and 1.7 million deaths from TB in 2006. The Bill and Melinda Gates Foundation supports her NIH and UK mentors for their shared commitment to preventing and treating diseases of the developing world. This vital connection provides Ellene an affiliation with the Gates Foundation which is sure to enrich her training as a biomedical researcher. Ellene strongly believes that interdisciplinary, translational research provides the tools to address the most urgent global health problems.